

Health Services for HIV/AIDS in New York State

Health Resource Needs

Data presented in this publication are used by both government and the health care industry to plan and expand health care services to meet the needs of HIV-infected persons. Creating access to care for the estimated 150,000 to 250,000 infected New York residents is complicated by the fact that many of them are poor, with no health insurance or routine contact with the health care system. An estimated 5,700 HIV-infected persons in New York City are homeless and temporarily housed, with no family or social support system.

While the annual incidence of AIDS in New York State appears to be leveling off, HIV/AIDS related hospital admissions continue to increase. In 1993, there were approximately 59,800 admissions, a 5 percent increase over 1992.

As improved treatments emerge for HIV infection, those who are infected require a broader spectrum of health care services. To meet this growing need, the state has developed special reimbursement rates to stimulate expansion of HIV-related primary care services, home care, adult day care, residential health care beds and supportive housing.

Caring for the HIV infected population in New York State by 1998 will require approximately 3,000 adult care hospital beds, 90 pediatric hospital beds, 1,210 nursing facility beds and home care capacity to serve 11,000 cases. As many as 13,000 health care professionals, including physicians, nurses, therapists and technicians will be needed exclusively to provide HIV/AIDS care.

HIV Uninsured Care Programs

The state administers three HIV Uninsured Care Programs: AIDS Drug Assistance Program (ADAP); ADAP Plus (ambulatory care); and the HIV Home Care Program. All three programs experienced steady increases in enrollment throughout 1994 with more than 16,000 individuals actively enrolled in the program during the year. As of December 31, 1994, ADAP had 12,382 active participants. Total ADAP enrollment for 1994 increased 27 percent from 1993. ADAP Plus ended 1994 with an active enrollment of 11,669 individuals; the total enrollment increased by 55 percent over 1993. ADAP Plus expanded its provider enrollment to include 129 hospitals and clinics, more than 200 private physicians and 85 laboratories. HIV Home Care had 276 active participants at the end of 1994. Total Home Care enrollment increased 94 percent over 1993.

The base of enrolled providers increased to more than 400 home health care agencies. Enrollment demographic trends in the programs generally reflect those of AIDS cases in New York State with increasing percentages of women, minorities and low-income individuals.

Hospital Use

The annual number of HIV/AIDS related hospitalizations in New York State grew from 2,000 in 1983 to approximately 60,000 in 1993. Hospitalization data reported to the statewide discharge data system (SPARCS) show an average daily census of 2,630 in 1993, which amounted to 4 percent of the statewide average daily census. In 1993, the HIV/AIDS average daily census comprised 8 percent of total hospitalized patients in New York City and 1 percent in the rest of the state.

Approximately 83 percent of HIV/AIDS hospital admissions in 1993 were in New York City. Manhattan had the largest proportion of the five boroughs, accounting for 43 percent of the statewide total and 51 percent of the city total.

HIV/AIDS hospital lengths of stay have been dropping steadily. The average stay was 23.4 days in 1983, 18.9 days in 1990 and 16.1

days in 1993. In 1988, 48 percent of stays were 10 days or less, and in 1993, 57 percent.

Children (up to age 12) make up 3 percent of HIV / AIDS hospital admissions. There have been about 2,000 pediatric admissions per year since the late 1980s. In 1993, children under one year of age represented 20 percent of the pediatric total, 44 percent were one to four years old, and children aged five to 12 years comprised 35 percent of all pediatric hospitalizations. The average length of stay of the entire pediatric group was 10.3 days, but children under one year of age had an average length of stay of 16.0 days.

The percent of hospitalized HIV / AIDS patients that are discharged home has dropped slightly, to approximately 65 percent. The percentage of patients who die in the hospital has decreased, from 15 percent in 1989 to 10 percent in 1991. The number of patients discharged to nursing homes is small but growing, and accounted for just over 1 percent of discharges in 1993. This growth is expected to continue through 1995, by which time New York's planned expansion of designated nursing home beds for HIV / AIDS patients will be completed. The number of patients discharged against

medical advice also has increased, from 8.5 percent of all discharges in 1987 to 14.3 percent in 1993.

The voluntary hospitals had about 71 percent of HIV / AIDS admissions in 1993 while public hospitals accounted for 28 percent of the total. Average length of stay in public hospitals is one-third greater than in the voluntary hospitals, and the public hospitals account for one-third of all HIV / AIDS hospital days. AIDS patients make up a greater proportion of the overall patient load in public hospitals than they do in voluntary hospitals. In 1993, 9 percent of all patient days in public hospitals were for HIV / AIDS patients, an 87 percent increase since 1988. In contrast, only 4 percent of total patient days in the voluntary hospitals were for HIV / AIDS patients, a 90 percent increase over the 1988 proportion. In New York City HHC hospitals, over 11 percent of patient days were attributable to HIV / AIDS.

Hospitals designated as AIDS Centers are providing care to a large proportion of HIV / AIDS patients. In 1993, about 48 percent of HIV / AIDS discharges were from AIDS Centers. Over 8 percent of total 1993 hospital days in the AIDS Centers were for HIV / AIDS patients, com-

pared with under 2 percent in hospitals that were neither designated centers nor New York City HHC hospitals. The average length of stay for AIDS patients in AIDS Centers was 16 days compared to 21 in New York City public hospitals and 13 days in other hospitals.

The number of patients hospitalized with both HIV and TB grew from about 100 in 1989, peaked at 5,500 in 1992 and declined to 4,500 in 1993. TB is a primary or secondary diagnosis in about 8 percent of all HIV / AIDS hospitalizations.

Medicaid remains the most common primary expected payor for HIV / AIDS patients, rising from 55 percent in 1986 to 65 percent in 1993. The increase in the proportion of Medicaid patients probably reflects the growing number of HIV-infected injecting drug users, their sexual partners and offspring. Blue Cross and commercial payors account for a declining proportion of cases, dropping from 26 to 14 percent during the period of 1989-1993.

Acute Care Bed Estimates

Projections of the number of hospital beds needed for AIDS patients from 1994 to 1998 were based on a methodology that combines AIDS case prevalence

with hospital use data. The methodology relies on historical trends in the growth of AIDS cases, hospital discharges and length of stay. The range in estimated future AIDS hospital bed need reflects the upper and lower bounds of AIDS case projections presented in the previous chapter.

In calculating bed need, it is assumed that during this period, alternative types of care will become available, including nursing facility and home care, thereby reducing by 10 percent the need for hospital beds for adult patients. The 10 percent estimate is based on a one day survey of hospitalized AIDS patients that showed 10 percent of the patients would be more appropriately placed in alternate settings.

Separate hospital bed need was calculated for pediatric patients (up to age 12). Pediatric bed need was based on projections of pediatric cases and on the historical ratio of hospital pediatric days to pediatric AIDS prevalence. The hospital occupancy rate was calculated at 75 percent for pediatric and 85 percent for adult beds.

In 1998, 3,060 hospital beds will be needed statewide; 3 percent of these will be targeted for pedia-

tric cases. For adult patients, 2,973 beds will be needed and 88 beds for pediatric patients.

Long Term Care Bed Need

The method used to estimate the need for institutional long term care is based on hospital discharge data from the AIDS Intervention Management System (AIMS) data base and on resident origin and length of stay data from AIDS designated nursing home programs. Five percent of unduplicated hospital patients were found to be appropriate for nursing home care, and community-origin patients were equal to 46 percent of hospital-origin patients. These proportions were applied to the projected number of persons ever hospitalized in the projection year.

In 1998, 1,211 nursing home beds will be needed to care for HIV/AIDS patients in New York State. In mid-1995, there were 1,139 designated AIDS nursing home beds in the state, 960 patients were in these beds and an additional 80 patients in other nursing home beds.

Home Health Care Need

The home care need is based on the AIMS data base and on data reported by home care agencies serving HIV/AIDS patients. The

methodology indicates that 14 percent of discharges need home care, and an additional 25 percent of home care patients will come from the community. There is a great variation in the intensity of home care services received by patients in regular, high-tech, hospice and long term home care models, but the methodology estimates that the average across all patients is 41 hours of nursing care and 271 hours of aide care per case.

In 1988, 451,000 hours of nursing care and 2,982,000 hours of aide care will be needed to care for an average census of 4,221 patients.

Primary Care Need Estimates

Estimates of the primary care needs of the HIV-infected population are based on a survey of HIV/AIDS primary care providers. Based on these protocols, providing primary care to the entire HIV-infected population would require between 1.4 and 2.3 million clinic/physician visits annually, not counting laboratory work. When these service needs are expressed in terms of health personnel requirements, a range of 310 to 520 full-time physicians, 220-360 physician assistant/nurse practitioners, 300-500 nurses and 110-180 social/mental health workers would be needed

to provide primary care to all HIV-infected New Yorkers.

Adult Day Care Need

The method used to estimate the need for adult day care is based on a survey of hospitalized AIDS patients. Of the long stay patients reviewed, about 9 percent were appropriate for adult day care. This proportion was applied to the projected number of persons ever hospitalized and was further adjusted to include admissions directly from the community. By 1998, estimates indicate a need to accommodate an average daily census of 860 persons in adult day care. In mid-1995, there were 181 licensed adult day care slots for HIV/AIDS patients, and an additional 620 slots had been approved and were expected to be in service by early 1997.

Health Personnel Need Estimates

The personnel estimates for hospital, residential health care facilities and adult day care are based on estimates of staff-to-patient ratios derived from a variety of sources. Projections of hospital personnel needed to care for HIV/AIDS patients rely on staff-to-patient ratios for all

patients in hospitals. The residential health facility staffing ratios were drawn from the experience of existing AIDS nursing home units. The adult day care ratios were based on staff at existing provider sites and on proposals for new service sites. The home care personnel estimates are based on estimates by providers of actual staff time spent on patient services. The primary care service estimates were based on a survey of primary care providers.

All staff estimates are expressed in terms of full-time equivalents (FTE). FTEs cannot be translated directly into numbers of staff employed. In some settings, such as home care, or with certain staff types, such as aides, part-time employment is relatively common, and the number of persons employed may be greater than the number of FTEs. For other staff types or settings, where overtime or long work hours are common, the number of persons employed may be smaller than the number of FTEs.

By 1998, 5,650 to 5,850 FTE RN/LPNs will be needed to care for HIV/AIDS patients in hospital, institutional, primary and

adult day care. About 80 percent of these nurses will be needed in hospitals. About 4,450 FTE aides will be needed among the various care settings. Another 1,300 FTE technicians and paraprofessionals will be needed in hospitals. Between 1,000 and 1,100 FTE therapists will be needed in residential health care facilities, primary care and adult day care settings. These are largely social, mental health workers and counselors.

Hospital personnel account for the largest portion of the need, 8,650 FTE (roughly two-thirds) of the total of 13,000 FTE staff in these five care sectors. Home care comprises 15 percent of the need, with 1,900 FTE staff; one-eighth of these are nurses and the remainder are aides. The large expansion in residential health care that New York has undertaken will produce 10 percent of the staff need, with nurses and aides predominating. Primary care need accounts for 7 to 11 percent of the total, with the need spread roughly evenly among physicians, physician assistants/nurse practitioners and nurses; there is substantial substitutability among these three staff types in actual practice in primary care sites.

HIV/AIDS Hospital Discharges, Days and Length of Stay

New York State, 1983 - 1993*

Year	HIV/AIDS Discharges	Days	Average Length of Stay
1983	2,104	49,313	23.4
1984	4,187	91,406	21.8
1985	8,083	171,454	21.2
1986	14,166	271,625	19.2
1987	20,748	410,965	19.8
1988	27,399	543,621	19.8
1989	34,685	666,025	19.2
1990	41,797	789,510	18.9
1991	51,318	905,402	17.6
1992	56,854	933,888	16.4
1993*	59,785	959,910	16.1

HIV/AIDS Patient Hospital Length of Stay

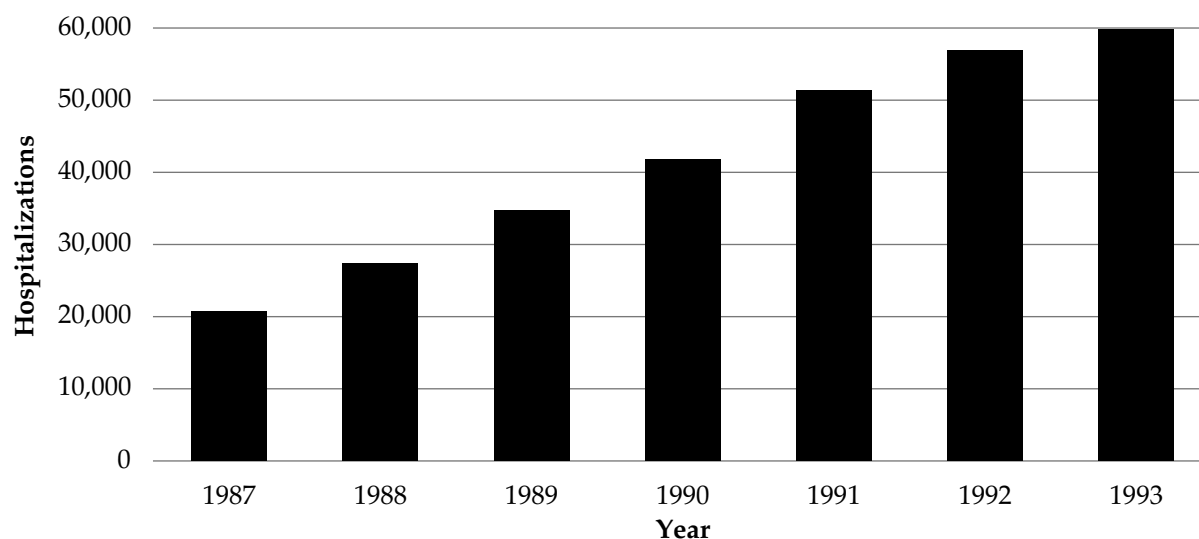
Days	1988		1989		1990		1991		1992		1993*	
	#	%	#	%	#	%	#	%	#	%	#	%
1-4	6,362	23.2	7,894	22.8	8,990	21.5	11,369	22.2	13 030	22.9	13,898	23.2
5-10	6,761	24.7	9,281	26.8	12,142	29.0	16,132	31.4	18 669	32.8	20,247	33.9
11-20	6,281	22.9	7,762	22.4	9,408	22.5	11,222	21.9	12 171	21.4	12,781	21.4
21-30	3,540	12.9	4,176	12	4,761	11.4	5,446	10.6	5 630	9.9	5,672	9.5
31-40	1,423	5.2	1,868	5.4	2,187	5.2	2,507	4.9	2 647	4.7	2,568	4.3
41-100	2,407	8.8	2,985	8.6	3,487	8.3	3,800	7.4	3 972	7.0	3,869	6.5
100+	625	2.3	719	2.1	822	2.0	842	1.6	735	1.3	750	1.3
Total	27,399	100.0	34,685	100.0	41,797	100.0	51,318	100.0	56 854	100.0	59,785	100.0

* Reporting for 1993 estimated to be 99% complete.

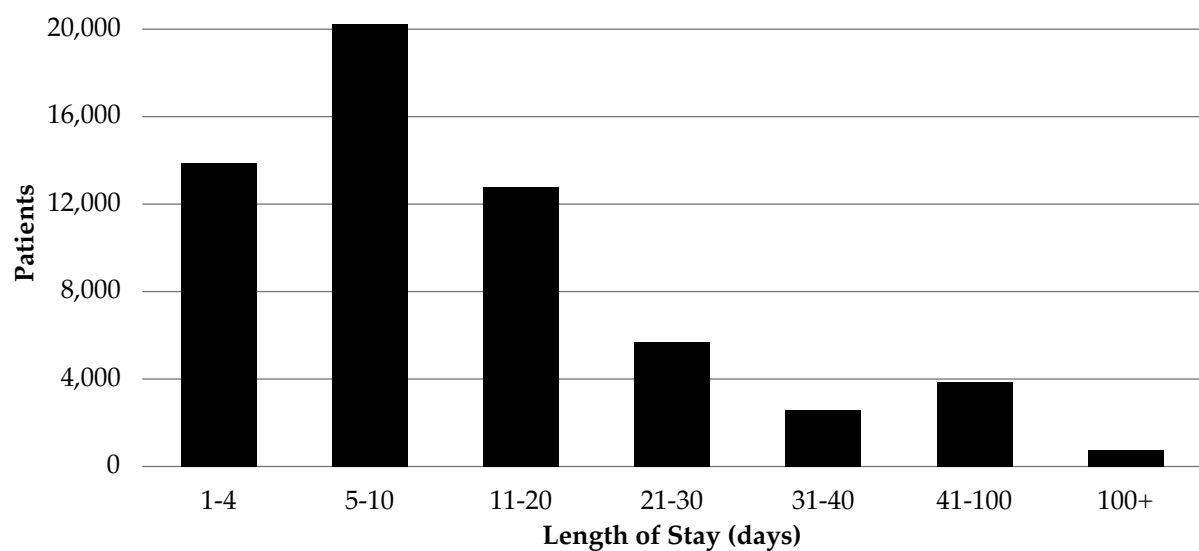
HIV/AIDS Hospital Discharges and Length of Stay

New York State, 1987 - 1993

HIV/AIDS Discharges by Year



HIV/AIDS Patient Hospital Length of Stay, 1993



HIV/AIDS Average Daily Inpatient Census

New York State, 1983 - 1993*

Location/Year	HIV/AIDS Average Daily Census	Total Average Daily Census	HIV/AIDS Percent of Total Census
New York City			
1983	120	32,642	0.37
1984	218	31,878	0.68
1985	411	30,960	1.33
1986	650	29,945	2.17
1987	984	30,562	3.22
1988	1,288	30,727	4.19
1989	1,558	30,563	5.10
1990	1,853	30,122	6.15
1991	2,145	30,652	7.00
1992	2,197	29,925	7.34
1993*	2,284	28,637	7.98
Rest of State			
1983	15	35,716	0.04
1984	32	35,110	0.09
1985	59	32,930	0.18
1986	95	30,644	0.31
1987	142	30,522	0.47
1988	197	30,640	0.64
1989	267	30,711	0.87
1990	310	30,276	1.02
1991	336	30,320	1.11
1992	354	29,781	1.19
1993*	346	28,776	1.20
New York State			
1983	135	68,358	0.20
1984	250	66,989	0.37
1985	470	63,890	0.74
1986	744	60,589	1.23
1987	1,126	61,084	1.84
1988	1,485	61,367	2.42
1989	1,825	61,275	2.98
1990	2,163	60,397	3.58
1991	2,481	60,973	4.07
1992	2,552	59,705	4.27
1993*	2,630	57,413	4.58

*Data for 1993 estimated to be 99% complete.

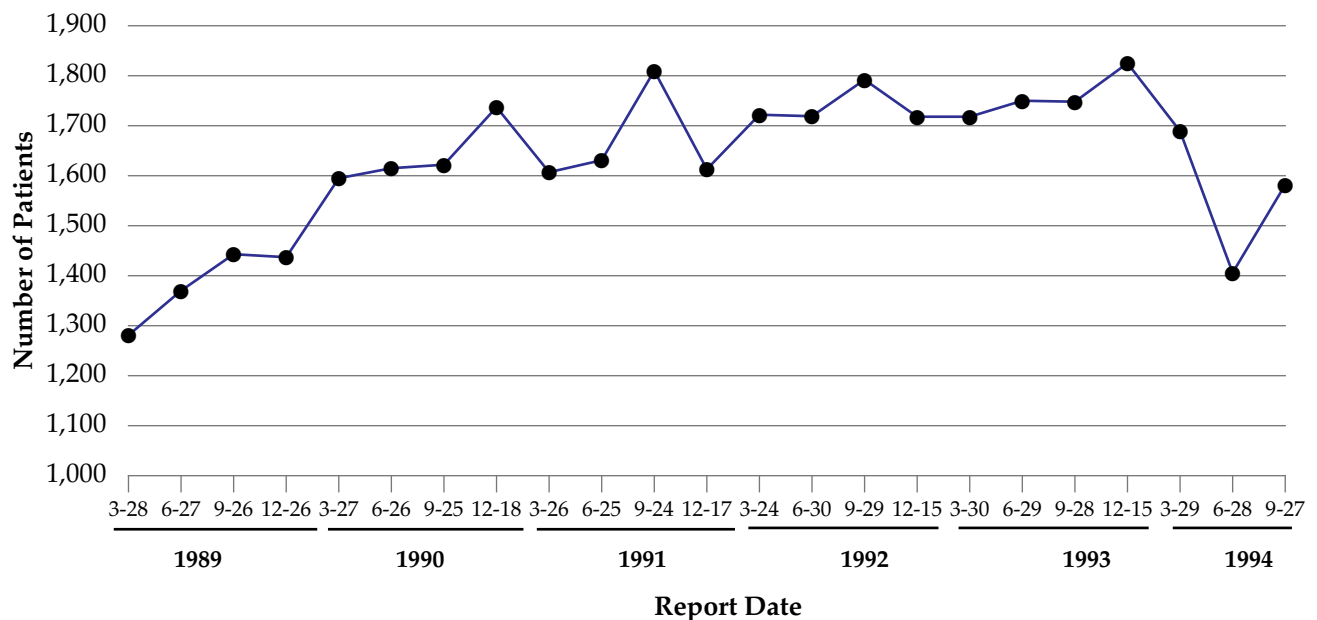
HIV/AIDS Inpatient Census

New York State, 1989 - 1994

One-Day Census of HIV/AIDS Inpatients in New York State

Report Date	HIV/AIDS Patient Census	Report Date	HIV/AIDS Patient Census
3/28/89	1,281	3/24/92	1,722
6/27/89	1,370	6/30/92	1,719
9/26/89	1,443	9/29/92	1,792
12/26/89	1,437	12/15/92	1,718
3/27/90	1,595	3/30/93	1,718
6/26/90	1,615	6/29/93	1,750
9/25/90	1,622	9/28/93	1,748
12/18/90	1,737	12/15/93	1,825
3/26/91	1,607	3/29/94	1,689
6/25/91	1,631	6/28/94	1,406
9/24/91	1,810	9/27/94	1,582
12/17/91	1,613		

One-Day Census of HIV/AIDS Inpatients in New York State



* Adjusted for nonreporting hospitals.

Pediatric HIV/AIDS Discharges, Days and Length of Stay by Age

New York State, 1989 - 1993*

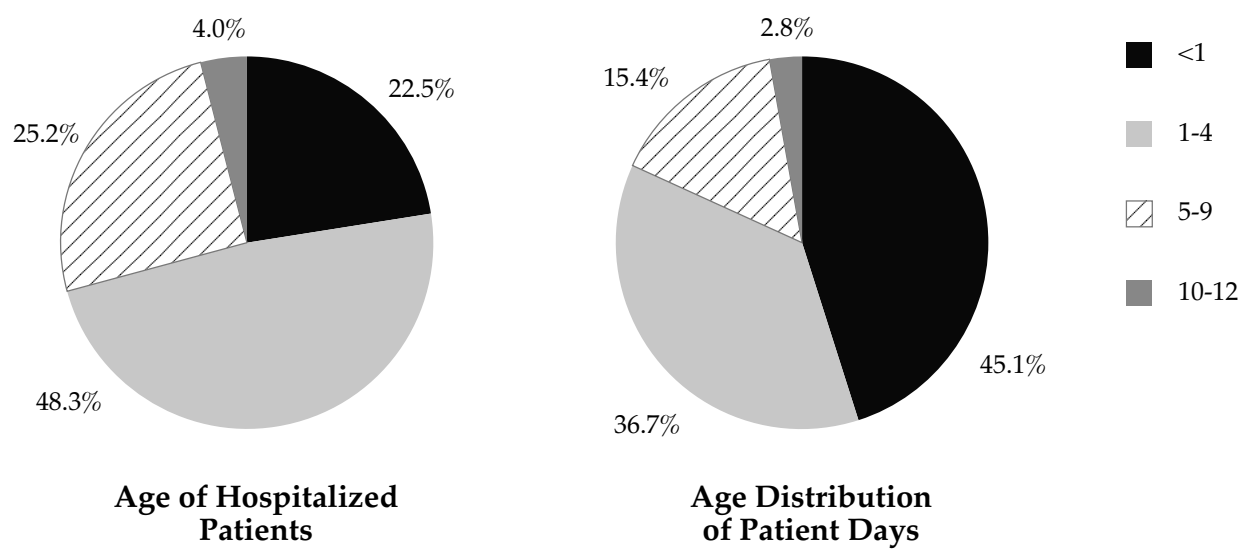
	Age	Discharges	Days	ALOS
1989	<1	447	11,109	24.9
	1-4	979	7,467	7.9
	5-9	550	3,656	6.6
	10-12	124	583	4.7
	Total	2,100	22,815	10.9
1990	<1	573	12,215	21.3
	1-4	822	8,324	10.1
	5-9	460	3,750	8.2
	10-12	94	886	9.4
	Total	1,949	25,175	12.9
1991	<1	539	9,188	17.0
	1-4	835	7,735	9.3
	5-9	443	4,379	9.9
	10-12	78	851	10.9
	Total	1,895	22,153	11.7
1992	<1	486	7,938	16.3
	1-4	937	7,754	8.3
	5-9	481	5,106	10.7
	10-12	100	746	7.5
	Total	2,004	21,544	10.8
1993	<1	399	6,387	16.0
	1-4	868	7,628	8.8
	5-9	551	4,577	8.3
	10-12	144	1,520	10.6
	Total	1,962	20,112	10.3
1983-1993*	<1	3,483	87,690	25.2
	1-4	7,466	71,780	9.6
	5-9	3,903	30,254	7.8
	10-12	631	5,414	8.6
	Total	15,483	195,138	12.6

*Reporting for 1993 estimated to be 99% complete.

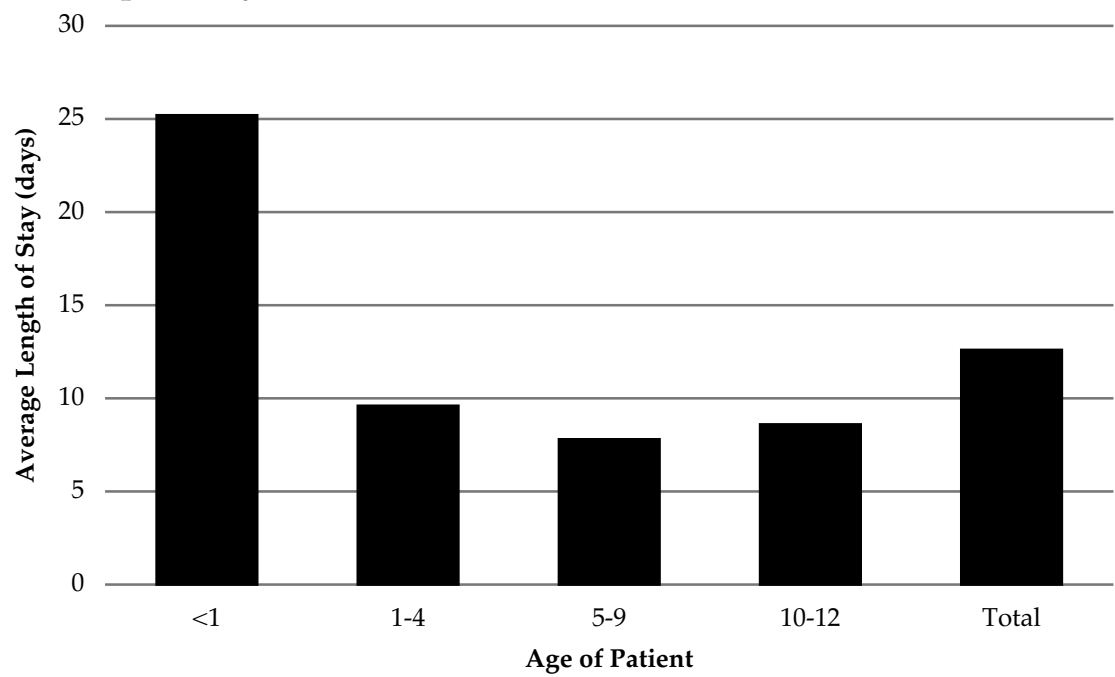
Pediatric HIV/AIDS Hospitalizations

by Age, Length of Stay and Percent of Days

New York State, 1983 - 1994



Length of Hospital Stay



HIV/AIDS Tuberculosis Hospitalizations and Length of Stay

New York State, 1983 - 1993*

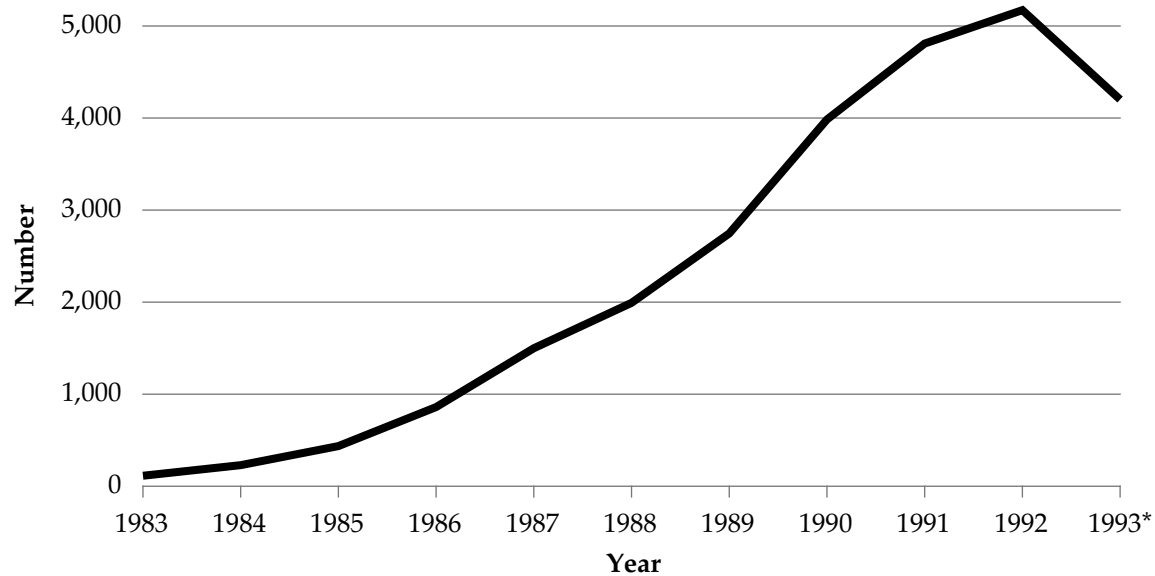
Year	HIV/AIDS TB Discharges	TB Discharges as % of all HIV/AIDS Discharges	HIV/AIDS TB Discharges Average Length of Stay
New York City			
1983	114	6.1	41.9
1984	229	6.3	36.1
1985	436	6.2	31.0
1986	860	7.0	25.8
1987	1,499	8.5	30.2
1988	1,992	8.7	30.7
1989	2,745	9.6	29.5
1990	3,984	11.6	30.4
1991	4,809	11.3	28.3
1992	5,172	10.9	26.7
1993	4,201	8.4	27.7
Rest of State			
1983	4	1.8	44.8
1984	13	2.4	24.1
1985	20	1.9	27.4
1986	83	4.4	24.0
1987	111	3.5	22.8
1988	195	4.4	25.1
1989	201	3.3	27.2
1990	265	3.6	27.2
1991	279	3.2	20.8
1992	351	3.7	20.5
1993	318	3.2	21.8
New York State			
1983	118	5.6	42.0
1984	242	5.8	35.4
1985	456	5.6	30.9
1986	943	6.7	25.7
1987	1,610	7.8	29.7
1988	2,187	8.0	30.2
1989	2,946	8.5	29.4
1990	4,249	10.2	30.2
1991	5,088	9.9	27.9
1992	5,523	9.7	26.3
1993	4,519	7.6	27.3

*Reporting for 1993 estimated to be 99% complete.

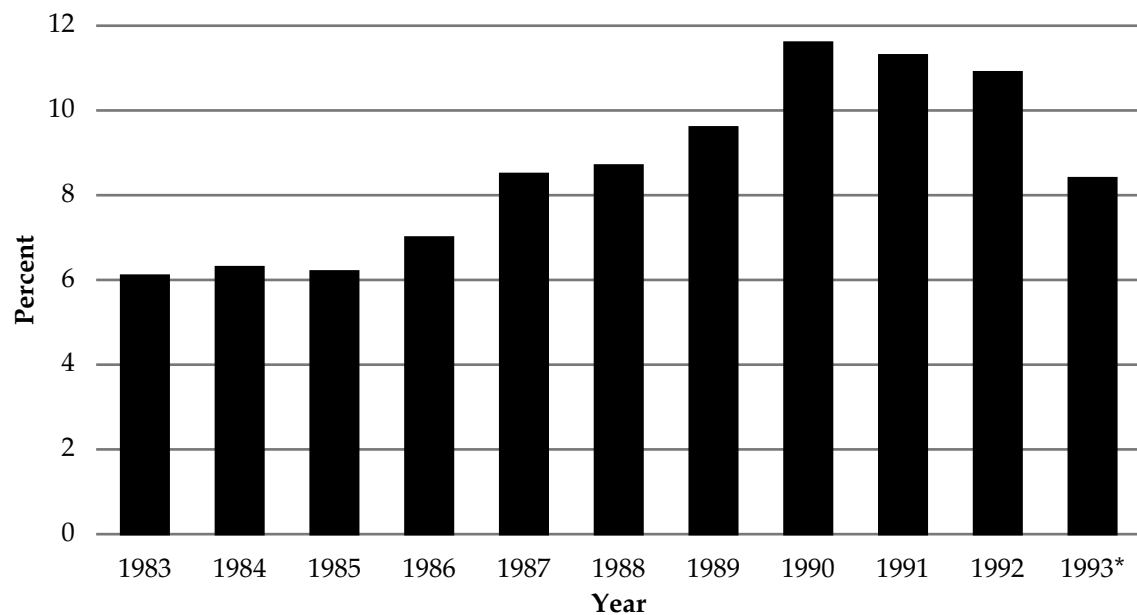
HIV/AIDS Tuberculosis Hospitalizations

New York City, 1983 - 1993*

HIV/AIDS/TB Hospitalizations



Percent of New York City HIV/AIDS Hospital Patients with TB



* Reporting for 1993 estimated to be 99% complete.

HIV/AIDS Inpatient Statistics by Hospital Location

New York State, 1990 - 1993*

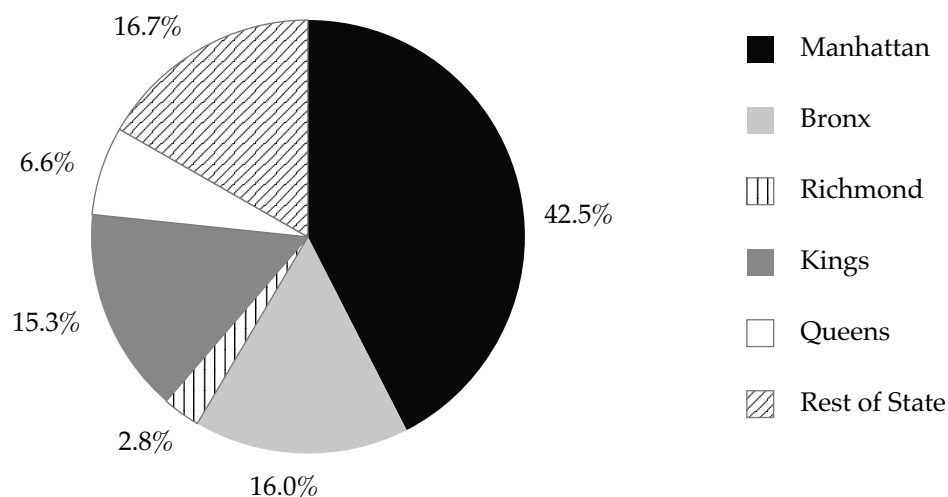
Location	HIV/AIDS Discharges	HIV/AIDS Discharges as % of Total	HIV/AIDS Patient Days	Days as % of Total	Average Length of Stay	Average Daily Census
1990						
Bronx	5,696	13.6	106,361	13.5	18.7	291
Manhattan	19,214	46.0	377,984	47.9	19.7	1,036
Kings	5,919	14.2	124,489	15.8	21.0	341
Queens	2,684	6.4	55,448	7.0	20.7	152
Richmond	875	2.1	12,016	1.5	13.7	33
Rest of State	7,409	17.7	113,212	14.3	15.3	310
Total	41,797	100.0	789,510	100.0	18.9	2,163
1991						
Bronx	7,723	15.0	128,669	14.2	16.7	353
Manhattan	22,695	44.2	429,527	47.4	18.9	1,177
Kings	7,496	14.6	147,435	16.3	19.7	404
Queens	3,227	6.3	61,518	6.8	19.1	169
Richmond	1,457	2.8	15,598	1.7	10.7	43
Rest of State	8,720	17.0	122,655	13.5	14.1	336
Total	51,318	100.0	905,402	100.0	17.6	2,481
1992						
Bronx	8,536	15.0	124,935	13.4	14.6	341
Manhattan	24,905	43.8	440,197	47.1	17.7	1,203
Kings	8,502	15.0	155,457	16.6	18.3	425
Queens	3,778	6.6	66,314	7.1	17.6	181
Richmond	1,635	2.9	17,365	1.9	10.6	47
Rest of State	9,498	16.7	129,620	13.9	13.6	354
Total	56,854	100.0	933,888	100.0	16.4	2,552
1993						
Bronx	9,579	16.0	142,214	14.8	14.8	390
Manhattan	25,403	42.5	448,914	46.8	17.7	1,230
Kings	9,134	15.3	163,777	17.1	17.9	449
Queens	3,963	6.6	61,344	6.4	15.5	168
Richmond	1,703	2.8	17,472	1.8	10.3	48
Rest of State	10,003	16.7	126,189	13.1	12.6	346
Total	59,785	100.0	959,910	100.0	16.1	2,630

*Reporting for 1993 estimated to be 99% complete.

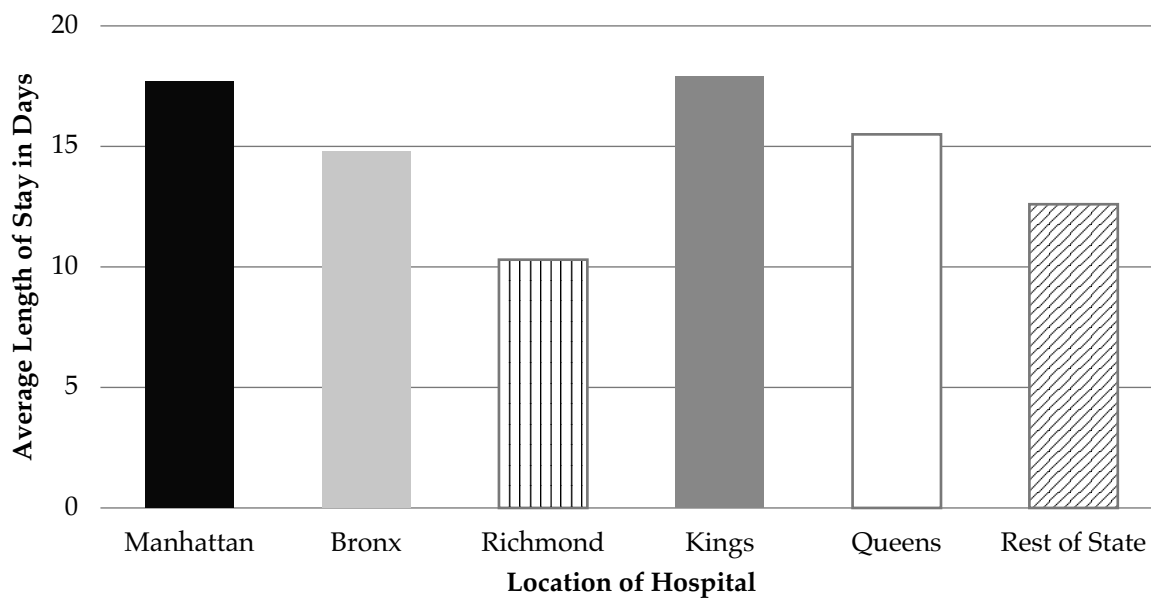
HIV/AIDS Inpatient Statistics by Hospital Location

New York State, 1993

Percent of HIV/AIDS Total Discharges by Hospital Location



HIV/AIDS Patient Average Length of Stay



HIV/AIDS Inpatient Statistics by Hospital Type

New York State, 1988 - 1993*

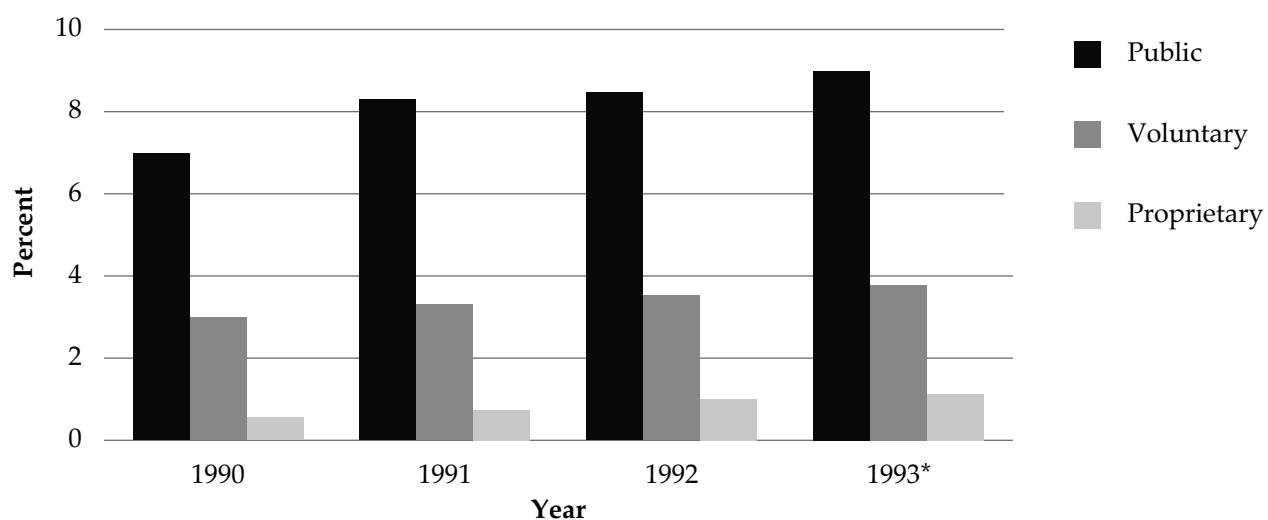
Location	Discharges	Discharges as % of HIV/AIDS Total	Days	Days as % of HIV/AIDS Total	Average Length of Stay	HIV/AIDS Day as % of all Hospital Days
1988						
Public	7,868	28.7	190,667	35.1	24.2	4.82
Voluntary	19,396	70.8	350,803	64.5	18.1	1.99
Proprietary	135	0.5	2,151	0.4	15.9	0.25
Total	27,399	100.0	543,621	100.0	19.8	2.42
1989						
Public	9,280	26.8	216,014	32.4	23.3	5.50
Voluntary	25,168	72.6	445,976	67.0	17.7	2.53
Proprietary	237	0.7	4,035	0.6	17	0.51
Total	34,685	100.0	666,025	100.0	19.2	2.98
1990						
Public	11,487	27.5	259,483	32.9	22.6	6.98
Voluntary	29,955	71.7	525,776	66.6	17.6	2.99
Proprietary	355	0.8	4,251	0.5	12	0.55
Total	41,797	100.0	789,510	100.0	18.9	3.58
1991						
Public	14,349	28.0	312,459	34.5	21.8	8.30
Voluntary	36,433	71.0	587,334	64.9	16.1	3.31
Proprietary	536	1.0	5,609	0.6	10.5	0.74
Total	51,318	100.0	905,402	100.0	17.6	4.07
1992						
Public	15,350	27.0	307,925	33.0	20.1	8.47
Voluntary	40,742	71.7	618,677	66.2	15.2	3.54
Proprietary	762	1.3	7,286	0.8	9.6	1.01
Total	56,854	100.0	933,888	100.0	16.4	4.27
1993*						
Public	16,222	27.1	318,617	33.2	19.6	8.99
Voluntary	42,731	71.5	634,083	66.1	14.8	3.78
Proprietary	832	1.4	7,210	0.8	8.7	1.12
Total	59,785	100.0	959,910	100.0	16.1	4.58

*Reporting for 1993 estimated to be 99% complete.

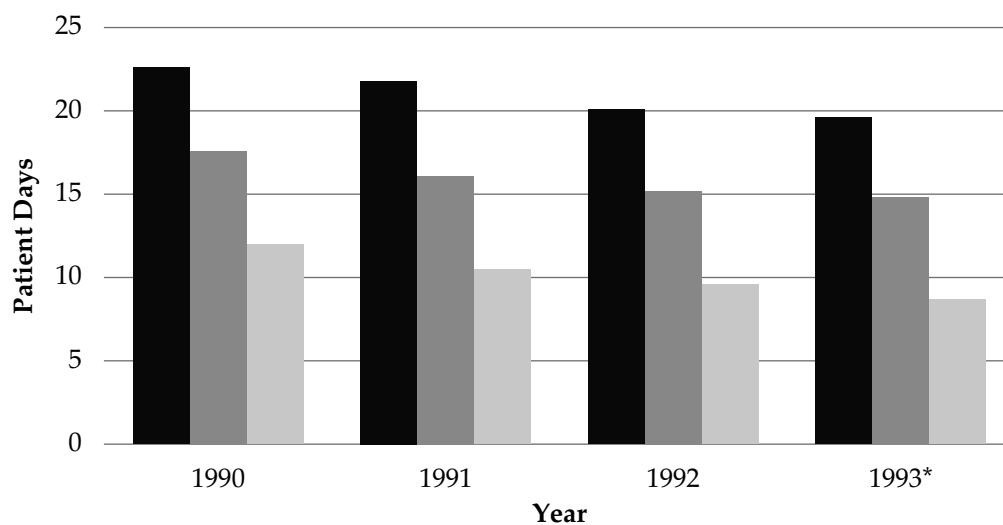
HIV/AIDS Inpatient Statistics by Hospital Type

New York State, 1990 - 1993*

HIV/AIDS Percent of Total Inpatient Days



HIV/AIDS Patient Average Length of Stay



* Reporting for 1993 estimated to be 99% complete.

HIV/AIDS Inpatient Statistics for Designated AIDS Centers, HHC* Hospitals and Other Hospitals New York State, 1988 - 1993[†]

Location	Discharges	Discharges as % of HIV/AIDS Total	Days	Days as % of HIV/AIDS Total	Average Length of Stay	HIV/AIDS Day as % of all Hospital Days
1988						
AIDS Centers (15) [‡]	8,945	32.6	171,284	31.5	19.1	5.29
HHC Hospitals	6,493	23.7	165,246	30.4	25.4	6.13
Other Hospitals	11,961	43.7	207,091	38.1	17.3	1.25
Total	27,399	100.0	543,621	100.0	19.8	2.42
1989						
AIDS Centers (20) [‡]	14,905	43.0	279,280	41.9	18.7	6.72
HHC Hospitals	7,333	21.1	180,834	27.2	24.7	6.74
Other Hospitals	12,447	35.9	205,911	30.9	16.5	1.33
Total	34,685	100.0	666,025	100.0	19.2	2.98
1990						
AIDS Centers (22) [‡]	19,086	45.7	352,676	44.7	18.5	7.70
HHC Hospitals	9,150	21.9	215,843	27.3	23.6	8.73
Other Hospitals	13,561	32.4	220,991	28.0	16.3	1.47
Total	41,797	100.0	789,510	100.0	18.9	3.58
1991						
AIDS Centers (24) [‡]	22,327	43.5	378,979	41.9	17.0	7.66
HHC Hospitals	11,585	22.6	266,778	29.5	23.0	10.62
Other Hospitals	17,406	33.9	259,645	28.7	14.9	1.76
Total	51,318	100.0	905,402	100.0	17.6	4.07
1992						
AIDS Centers (25) [‡]	25,463	44.8	406,914	43.6	16.0	8.22
HHC Hospitals	12,528	22.0	261,052	28.0	20.8	10.91
Other Hospitals	18,863	33.2	265,922	28.5	14.1	1.83
Total	56,854	100.0	933,888	100.0	16.4	4.27
1993[†]						
AIDS Centers (29) [‡]	28,898	48.3	455,464	47.4	15.8	8.41
HHC Hospitals	11,958	20.0	251,087	26.2	21.0	11.54
Other Hospitals	18,929	31.7	253,359	26.4	13.4	1.90
Total	59,785	100.0	959,910	100.0	16.1	4.58

* HHC - New York City Health and Hospitals Corporation.

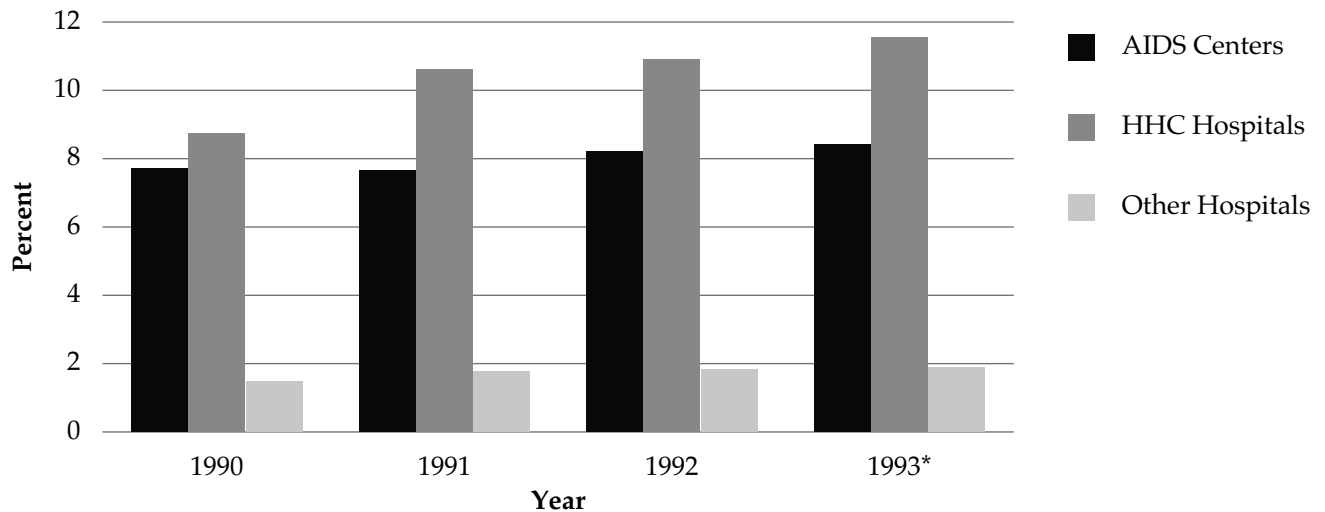
[†] Reporting for 1993 estimated to be 99% complete.

[‡] Number of Designated AIDS Center hospitals.

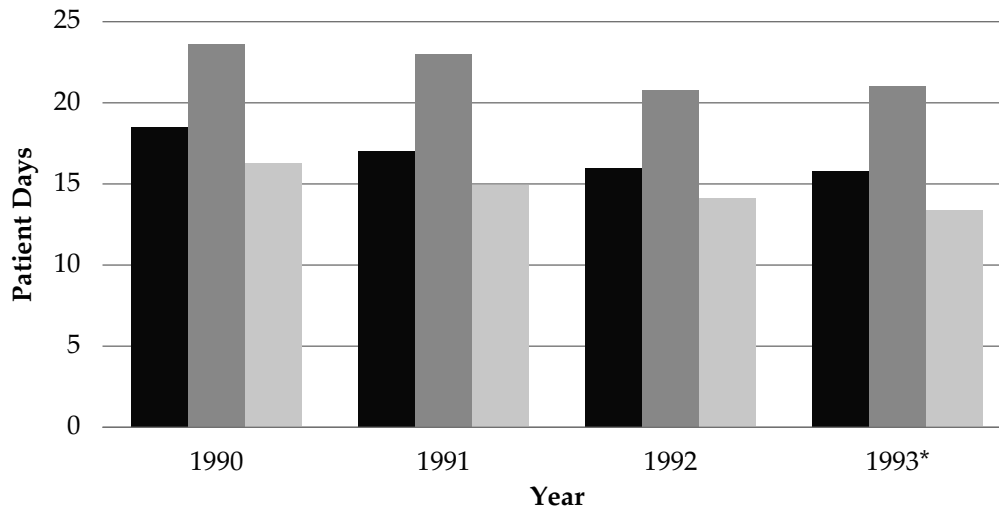
HIV/AIDS Inpatient Statistics for Designated AIDS Centers and Other Hospitals

New York State, 1990 - 1993*

HIV/AIDS Percent of Total Inpatient Days



HIV/AIDS Patient Average Length of Stay



* Reporting for 1993 estimated to be 99% complete.

HIV/AIDS Hospital Discharges by Disposition

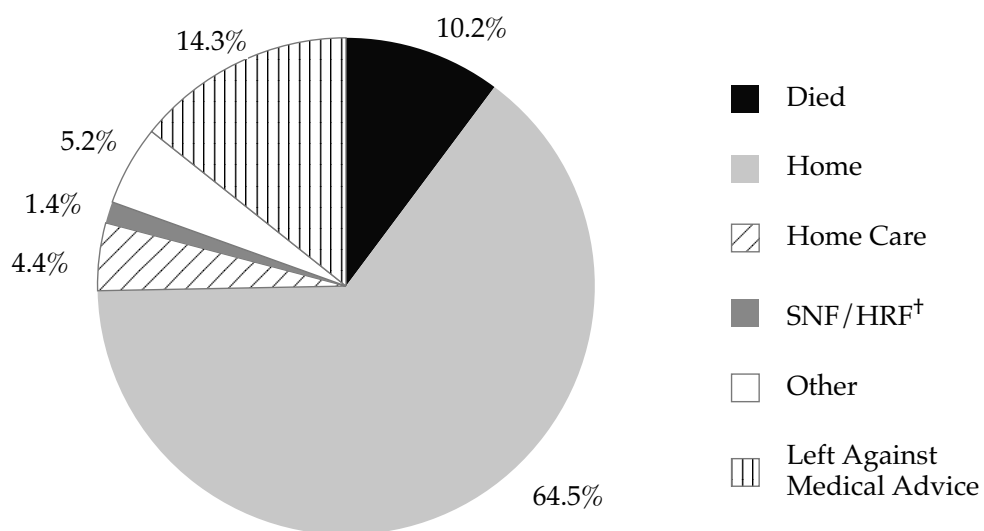
New York State, 1989 - 1993*

Disposition	1989		1990		1991		1992		1993*	
	#	%	#	%	#	%	#	%	#	%
Other Acute Hospital	388	1.1	426	1.0	750	1.5	740	1.3	822	1.4
Skilled Nursing Facility (SNF)	194	0.6	161	0.4	343	0.7	573	1.0	817	1.4
Health Related Facility (HRF)	41	0.1	48	0.1	54	0.1	0	0.0	0	0.0
Other Institution	1,149	3.3	1,390	3.3	1,777	3.5	2,107	3.7	2,031	3.4
Home	23,776	68.5	29,134	69.7	34,861	67.9	37,376	65.7	38,576	64.5
Home Health Care	830	2.4	1,045	2.5	1,439	2.8	2,205	3.9	2,631	4.4
Against Medical Advice	2,949	8.5	3,991	9.5	5,898	11.5	7,681	13.5	8,537	14.3
Died	5,228	15.1	5,476	13.1	5,969	11.6	5,958	10.5	6,083	10.2
Psychiatric Chronic Care	130	0.4	126	0.3	227	0.4	210	0.4	288	0.5
Total	34,685	100	41,797	100	51,318	100	56,854	100	59,785	100

* Reporting for 1993 estimated to be 99% complete.

HIV/AIDS Hospital Discharges by Disposition

New York State, 1993*



* Reporting for 1993 estimated to be 99% complete.

[†]Skilled Nursing Facility (SNF)/Health Related Facility (HRF).

HIV/AIDS Hospitalizations

by Primary Expected Payor by Year

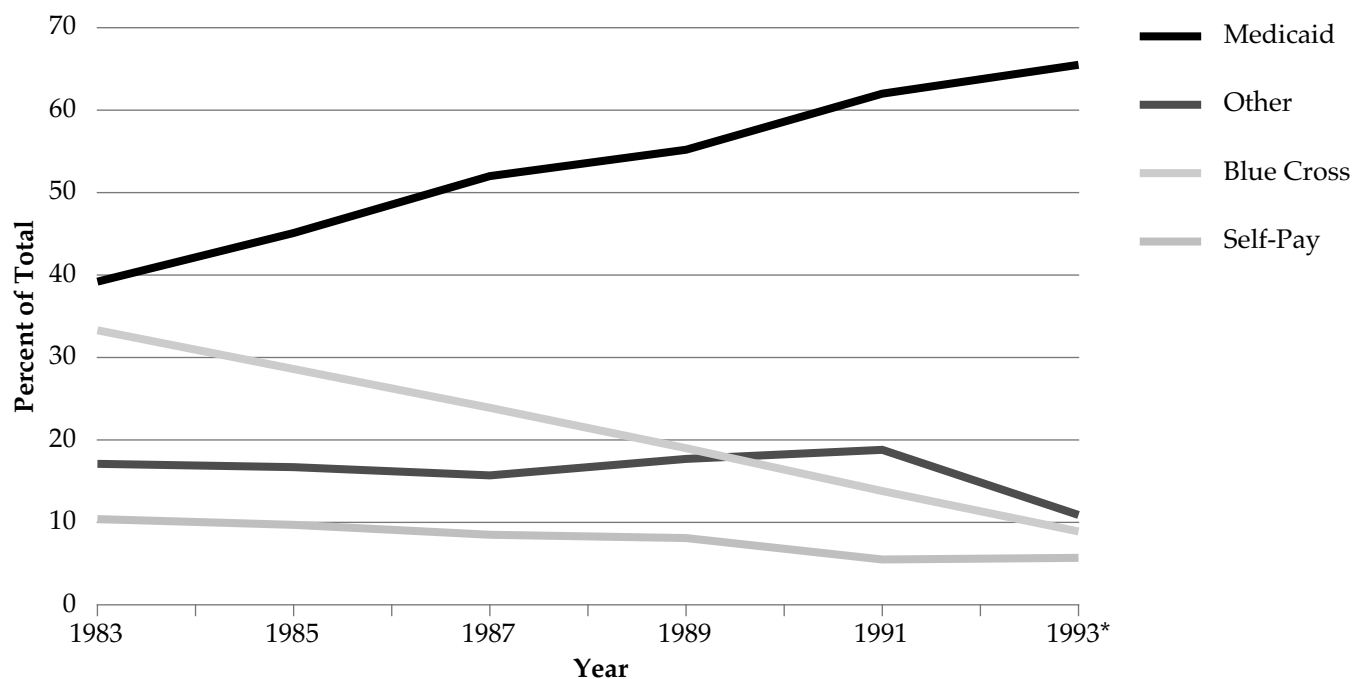
New York State, 1989 - 1993*

Payor	1989		1990		1991		1992		1993*	
	#	%	#	%	#	%	#	%	#	%
Self-Pay	2,818	8.1	2,529	6.1	2,836	5.5	2,934	5.2	3,430	5.7
Medicare	1,366	3.9	2,092	5.0	2,911	5.7	3,963	7.0	5,357	9.0
Medicaid	19,131	55.2	24,936	59.7	32,100	62.6	36,952	65.0	39,161	65.5
Blue Cross	6,600	19.0	6,773	16.2	6,924	13.5	6,295	11.1	5,330	8.9
Commercial	2,463	7.1	2,652	6.3	3,251	6.3	3,398	6.0	3,038	5.1
No Charge	556	1.6	741	1.8	924	1.8	797	1.4	774	1.3
Other	1,751	5.0	2,074	5.0	2,372	4.6	2,515	4.4	2,695	4.5
Total	34,685	100	41,797	100	51,318	100	56,854	100	59,785	100

*Reporting for 1993 estimated to be 99% complete.

HIV/AIDS Hospitalizations by Primary Expected Payor by Year

New York State, 1983 - 1993*



* Reporting for 1993 estimated to be 99% complete.

HIV Uninsured Care Programs

AIDS Drug Assistance Program (ADAP), ADAP Plus, HIV Home Care Enrollment and Demographics

New York State, 1994

	ADAP		ADAP Plus		HIV Home Care	
	#	%	#	%	#	%
Total Enrollment	16,649	100.0	14,809	100.0	1,078	100.0
New Enrollees-Year (12/31/94)	5,613	33.7	6,438	43.5	879	81.5
Gender						
Male	13,655	82.0	12,083	81.6	863	80.1
Female	2,994	18.0	2,726	18.4	215	19.9
Age						
< 13	126	0.8	111	0.7	13	1.2
13-19	66	0.4	63	0.4	2	0.2
20-29	3,103	18.6	2,770	18.7	107	9.9
30-39	7,791	46.8	6,887	46.5	412	38.2
40-49	4,158	25.0	3,716	25.1	330	30.6
> 49	1,405	8.4	1,262	8.5	214	19.9
Race/Ethnicity						
White	6,209	37.3	5,207	35.2	441	40.9
Black	4,982	29.9	4,588	31.0	371	34.4
Hispanic	4,932	29.6	4,562	30.8	228	21.2
Asian	155	0.9	139	0.9	13	1.2
Native American	47	0.3	42	0.3	3	0.3
Unknown	324	1.9	271	1.8	22	2.0
Household Size						
1	14,158	85.0	12,591	85.0	815	75.6
2	1,095	6.6	966	6.5	128	11.9
3+	1,396	8.4	1,252	8.5	135	12.5
Income						
< \$10,000	9,778	58.7	9,094	61.4	549	50.9
10,000-19,999	3,643	21.9	3,189	21.5	246	22.8
20,000-29,999	2,026	12.2	1,684	11.4	147	13.6
30,000-39,999	879	5.3	618	4.2	87	8.1
40,000-49,999	246	1.5	171	1.2	37	3.4
50,000+	77	0.5	53	0.4	12	1.1
Clinical Status						
CDC AIDS	7,894	47.4	7,208	48.7	1,004	93.1
HIV Symptomatic	3,429	20.6	2,848	19.2	74	6.9
Asymptomatic	4,226	25.4	3,739	25.2	0	0.0
Unknown	1,100	6.6	1,014	6.8	0	0.0
Geographic Region						
Central	438	2.6	384	2.6	11	1.0
Long Island	1,228	7.4	1,083	7.3	119	11.0
Mid-Hudson	370	2.2	474	3.2	22	2.0
Lower Hudson	656	3.9	580	3.9	39	3.6
Northeastern	609	3.7	546	3.7	22	2.0
New York City	11,907	71.5	10,630	71.8	806	74.8
Rochester	595	3.6	493	3.3	23	2.1
Southern Tier	77	0.5	68	0.5	4	0.4
Western	609	3.7	551	3.7	32	3.0

* Participants enrolled at any point during the period 1/1/94 to 12/31/94.

Projected Hospital Bed Need for HIV/AIDS Adult and Pediatric Patients

New York State, 1994 - 1998

Adult Bed Need¹

Year	Total Adult Days	Average Daily Census	Total Adult Beds [†] (85% Occupancy)	NYC Beds	Rest of State
1994	1,038,571	2,561	3,013	2,715	406
1995	1,075,621	2,652	3,120	2,715	406
1996	1,058,424	2,603	3,062	2,664	398
1997	1,042,630	2,571	3,025	2,631	393
1998	1,025,009	2,527	2,973	2,587	387

Pediatric Bed Need^{*}

Year	Total Pediatric Days	Average Daily Census	Total Pediatric Beds [†] (75% Occupancy)	NYC Beds	Rest of State
1994	22,297	61	81	66	16
1995	23,664	65	86	70	17
1996	24,194	66	88	71	17
1997	24,194	66	88	71	17
1998	23,970	66	88	71	17

*The high-low range reflects the upper and lower bounds of AIDS case projections through 1998 presented in this publication.

†Adult bed needs adjusted downward by 10% for alternate care from 1994 to 1998.

Projected Long Term Care Bed Need for HIV/AIDS Patients

New York State, 1994 - 1998

Nursing Facility Beds

Year	Adult Unduplicated HIV/AIDS Hospital Discharges [†]	Nursing Facility Population [‡]	Total Days Average Length of Stay = 160 Days	Nursing Facility Patient Census	Bed Need at 90% Occupancy
1994	34,441	2,519	403,042	1,104	1,227
1995	35,670	2,609	417,420	1,144	1,271
1996	35,099	2,567	410,746	1,125	1,250
1997	34,576	2,529	404,617	1,109	1,232
1998	33,991	2,486	397,779	1,090	1,211

[†]Based on 1.85 admissions per HIV / AIDS hospital patient.

[‡]Nursing facility population based on 5.0% of unduplicated discharges, with additional community-based individuals equivalent to 46% of hospital origin population.

Projected Adult Day Care Need for HIV/AIDS Patients

New York State, 1994 - 1998

Adult Day Care Slots

Year	Adult Unduplicated HIV/AIDS Hospital Patients [†]	Hospital-Origin ADC Population	Community-Origin ADC Population	Total ADC Population [‡]	ADC Daily Census (slots) [§]
1994	34,441	2,965	1,977	4,942	870
1995	35,670	3,071	2,047	5,119	902
1996	35,099	3,022	2,015	5,037	887
1997	34,576	2,977	1,985	4,962	874
1998	33,991	2,927	1,951	4,878	859

[†]Based on 1.85 admissions per HIV / AIDS hospital patient.

[‡]Hospital-origin patients based on 8.6% of hospital census, with additional community-based patients making 40% of the total.

[§]Based on five months of care, three days/week.

Projected Home Health Care Resources Needed to Care for HIV/AIDS Patients

New York State, 1994 - 1998

Home Health Care Hours per Year

Year	Adult Discharges	Home Care Cases*	Average Daily Census†	<u>In thousands</u>	
				Nurse RN/LPN Hours‡	Aide Hours§
1994	63,716	11,150	4,277	457	3,022
1995	65,989	11,548	4,429	473	3,130
1996	64,934	11,363	4,359	466	3,079
1997	63,965	11,194	4,294	459	2,982
1998	62,884	11,005	4,221	451	2,982

Home Health Care Personnel Need by Year

	Nurses RN/LPN FTEs ∞	Aides FTEs∞
1994	254	1,679
1995	263	1,739
1996	259	1,711
1997	255	1,685
1998	251	1,657

* Based on 14% of hospital discharges needing home care with additional 25% of cases coming from the community.

† Based on average length of stay of 140 days.

‡ Based on 41 average hours of nursing care per case.

§ Based on 271 average hours of aide care per case.

∞ Based on 1,800 hours per year per full-time equivalent.

Estimated Primary Care Service and Personnel Needs of HIV-Infected Persons*

New York State, 1994

Service	Visits	Staff Hours Required per Year [†]			
		Physicians	Physician Asst./Nurse Practitioner	Nurse	Mental Health Worker
Initial Evaluation and Screening	7,500 [‡] - 12,500 [‡]	4,500 - 7,500	2,850 - 4,750	3,000 - 5,000	3,900 - 6,500
Monitoring and Prophylaxis	777,150 - 1,295,250	210,600 - 351,000	205,650 - 342,750	200,400 - 334,000	143,250 - 238,750
Illness [§]	557,100 - 928,500	202,200 - 337,000	72,150 - 120,250	185,100 - 308,500	23,700 - 39,500
Gynecology	37,500 - 62,500	7,050 - 11,750	10,200 - 17,000	7,050 - 11,750	
Phone Consultation		74,100 - 123,500	56,400 - 94,000	80,100 - 133,500	
Total Staff Hours Required		498,450 - 830,750	347,250 - 578,750	475,650 - 792,750	170,850 - 284,750
Full-time Equivalent Personnel Required		312 - 519	217 - 362	297 - 495	107 - 178

*Based on an estimated range of 150,000 - 250,000 infected persons.

[†]Visit frequency and staff time based on survey of primary care providers.

[‡]Number of patients receiving initial service package, which may occupy several visits.

[§]Including Emergency Room visits not resulting in hospital admission.

Projected Health Personnel Needed to Care for HIV/AIDS Patients

New York State, 1998

Full-time Equivalent Health Personnel Need

	Hospital Care	Residential Health Care Facility	Home Care	Primary Care*	Adult Day Care
Physicians				312 - 519	
Physician Assistants/ Nurse Practitioners				217 - 362	
Nurses [†]	4,558	509	251	297 - 495	34
Technicians and Other Paraprofessionals [‡]	1,329	5			
Aides [§]	2,149	608	1,657		34
Therapists [∞]	608	230		107 - 178	86

* Primary care estimate is for 1994.

† Includes registered and practical nurses.

‡ Includes emergency medical technician, medical clinical lab technician, dental hygienist, medical records technician, nuclear technician, surgical technician, physician assistant and other paraprofessionals.

§ Includes medical assistant, aide, orderly, home health aide and physical aide.

∞ Includes physical, occupational and respiration therapist and social worker.